



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,586	12/22/2000	Bruce K. Johnson	8470/PMC	2671
20349	7590	08/12/2004	EXAMINER	
POLAROID CORPORATION PATENT DEPARTMENT 1265 MAIN STREET WALTHAM, MA 02451			GRANT II, JEROME	
			ART UNIT	PAPER NUMBER
			2626	4

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,586

Applicant(s)

JOHNSON, BRUCE K.

Examiner

Jerome Grant II

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 6-9 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

JEROME GRANT II
PRIMARY EXAMINER

Detailed Action

1.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-5 and 10-20 are, drawn to a printer, classified in class 358, subclass 1.2.
- II. Claims 6-9 are, drawn to a mechanical motor with a lever arm having a plurality of lenses for moving the lenses in and out of an optical path, classified in class 359, subclass 355 or 508.

The inventions are distinct, each from the other because the invention of group 1, the printer having a lens are related as subcombinations disclosed as usable together in a single combination with respect to group 2. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of group 1 is directed toward a printer with different lenses for varying the resolution. On the other hand, group 2 is directed toward a mechanism for changing lenses in and out of an optical path, which may have utility in an image scanning environments as well as a printing environment. See MPEP § 806.05(d). Invention of group 1 and the invention of group 2 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions.

Art Unit: 2626

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

2.

During a telephone conversation with Guy Macaroni on Aug. 4, 2004 a provisional election was made with traverse to prosecute the invention of Group I including claims 1-5 and 10-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 6-9 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyakawa in view of Huang.

Miyakawa teaches a printer (recording device according to col.2, lines 606-5) having a housing that encloses as claimed a digital area array (micro display LCD) including an array 10A with array elements 13, 11, 12A, 12B, 15B and 16B as shown by figure 2, and a plurality of lens 40 and an image plane (perpendicular to the viewing page 30) onto which a photosensitive medium 30 may be superpose such that: said lenses 40 are located between the array (11, 12A, 12B, 13, 15B, 16B) and the image plane (perpendicular to the viewing page and parallel to element 30); said digital are array display, said plurality of lenses and the image place are spaced as claimed according to figure 2 wherein the lenses are for bringing images into focus.

What is not specifically shown by Miyakawa is one of the lenses being a transposable one and capable of being transposed out of said optical axis during a printing operation for increasing the resolution of an image.

Huang teaches a changeable resolution apparatus including a plurality of lenses 11(a-d) which are transposable along an optical axis (see figure 6) during a scanning operation to improve the image resolution.

Art Unit: 2626

Since Huang is directed toward an optical device for improving the image resolution including a plurality of lenses, and Miyakawa is directed toward a printer having plural lenses, the purpose of using lenses that are transposable would have been contemplated by Miyakawa as set forth by the teaching of Huang for the purpose of improving the resolution of images.

It would have been obvious to one of ordinary skill in the art to replace or modify lens 22 of Miyakawa with a lens wheel 1 having a plurality of dioptic members with different resolutions so that the lens members extend in the direction of the light source 10 of Miyakawa but are rotated selectively in the optical path of the light member and photosensitive material 14 so as to affect a change in image resolution at a time of a printing operation.

With respect to claim 2, see figure 2 and display 10A . The display is fabricated at the micro level.

With respect to claim 3, see figure 2 and display 10A, See also col. 2, line 58.

With respect to claim 4, Huang teaches the plural lenses 11(a-d) whereby all of the lenses are transposable.

With respect to claim 5, All the lenses shown by both references have different diopters for different resolutions.

Art Unit: 2626

4. Claims Allowed

Claims 10-20 are allowed for the reason the prior art does not teach in claimed combination, "... transposing said transposable lens a fixed distance, in a first direction... illuminating said digital display for a second fixed period of time, using a second digital image data set, turning off said digital display and whereby said method of imaging increases the perceived resolution of the digital image focused on the image plane."

Art Unit: 2626

5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 703-305-4391. The examiner can normally be reached on Mon.-Fri. from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams, can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Grant II

JEROME GRANT II
PRIMARY EXAMINER